

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:	AVALLONE et al.	)	Confirmation No.:	6897
		)		
Application No.:	09/828,444	)	Group Art Unit:	3621
		)		
Filed:	April 6, 2001	)	Examiner:	P. Elisca

For: METHODS AND SYSTEMS FOR PROVIDING PERSONALIZED INFORMATION  
TO USERS IN A COMMERCIAL ESTABLISHMENT

**APPEAL BRIEF**

**MAIL STOP APPEAL BRIEF-PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is being submitted in accordance with 37 CFR 41.37. The Appeal Brief is in response to a Final Office Action dated November 2, 2006 and a Notice of Panel Decision from Pre-Appeal Brief Review dated April 4, 2007. The Notice of Appeal (with the requisite fee) and the Pre-Appeal Brief Request for review were submitted on February 2, 2007.

Appellant hereby authorizes any fees or other charges necessary for consideration of this appeal to be charged to Deposit Account No. 50-1059.

1. ***REAL PARTIES IN INTEREST***

The real parties in interest in this pending application are Ahold Licensing SA, an affiliate of Koninklijke Ahold NV, and Cuesol, Inc., both of whom are an Assignee of an inventor's interest, which assignments have been duly recorded in the United States Patent and Trademark Office.

2. ***RELATED APPEALS AND INTERFERENCES***

Appellant, Appellant's legal representative and Assignees do not know of any other prior and pending appeals, interferences or judicial proceedings which may be related to, directly affect or be directly affected by or have a bearing on the Board of Patent Appeals and Interference's decision in this pending appeal.

3. ***STATUS OF CLAIMS***

Claims 1-43 have been canceled, claims 44-80 are rejected and claims 81 and 82 have not been examined or addressed by the Examiner. Claims 44-82 are being appealed. A clean copy of the appealed claims (claims 44-82) is attached hereto in the Claims Appendix.

4. ***STATUS OF AMENDMENTS***

No claim amendments were filed after final rejection.

5. ***SUMMARY OF CLAIMED SUBJECT MATTER***

Independent claim 44 recites a system 100 for providing personalized information to a user in a commercial establishment, the system 100 comprising: at least one database 71-81 storing information related to a user (*See e.g.*, Specification at page 15, line 18 to page 16, line 5 and FIGs. 1B and 3); a plurality of portable display units 10 located in a commercial establishment for use by a plurality of users in a commercial establishment (*See e.g.*, Specification at page 13, line 14 to page 14, line 11 and FIG. 1A), each portable display unit 10 of the plurality of portable display units 10 having a unique identifier (*See e.g.*, Specification at page 19, lines 17-24), and each portable display unit 10 comprising a transceiver 14, a memory device 17, 21, a user interface 12, 24, a display screen 12, a microprocessor 16, and at least one program executable by the microprocessor 16 to enable receiving, storing, and displaying of information to a user in a commercial establishment (*See e.g.*, Specification at page 14, line 12 to page 15, line 13 and at page 19, lines 10-11 and FIG. 2), wherein a user activates a portable display unit 10 of the plurality of portable display units 10 to operate in a commercial establishment by providing identifying information (*See e.g.*, Specification at page 19, lines 3-

20); a location tracking system 45 to determine a location of the activated portable display unit 10 in a commercial establishment (*See e.g.*, Specification at page 23, lines 8-14 and FIGs. 1A and 4); a server computer 30, the server computer 30 being in communication with the location tracking system 45 and the at least one database 71-81 (*See e.g.*, Specification at page 16, lines 6-13 and FIGs. 1A and 3) and the server computer 30 being configured to generate personalized information for a user in a commercial establishment based on the location of the activated portable display unit 10 and the information related to a user stored in the at least one database 71-81 (*See e.g.*, Specification at page 26, line 23 to page 27, line 4); and at least one transceiver 55 in communication with the server computer 30 for transmitting the personalized information generated by the server computer 30 to the activated portable display unit 10 (*See e.g.*, Specification at page 16, lines 6-13 and FIG. 1A).

Independent claim 68 recites a method of providing personalized information to a user in a commercial establishment, comprising the steps of: providing a plurality of portable display units 10 for use by a plurality of users in a commercial establishment (*See e.g.*, Specification at page 13, line 14 to page 14, line 11 and FIG. 1A); storing information related to a user in at least one database 71-81 (*See e.g.*, Specification at page 15, line 18 to page 16, line 5 and FIGs. 1B and 3); activating, by a user, a portable display unit 10 of the plurality of portable display units 10 to operate in a commercial establishment by providing identifying information (*See e.g.*, Specification at page 19, lines 3-20); determining a location of a user in a commercial establishment with a location tracking system 45 (*See e.g.*, Specification at page 25, line 16 to page 26, line 22 and FIG. 4); generating personalized information for a user in a commercial establishment based on the location of a user in a commercial establishment and the information related to a user stored in the at least one database 71-81 (*See e.g.*, Specification at page 26, line 23 to page 27, line 4); and transmitting the generated personalized information to the portable display unit 10 operated by a user in a commercial establishment (*See e.g.*, Specification at page 16, lines 6-13 and FIG. 1A), the portable display unit 10 being assigned a unique identification signal and having a transceiver 14, a memory device 17, 21, a user interface 12, 24, a display screen 12, a microprocessor 16, and at least one program executable by the microprocessor 16 to enable the portable display unit 10 to receive, store, and display the personalized information to a

user in a commercial establishment (*See e.g.*, Specification at page 14, line 12 to page 15, line 13 and at page 19, lines 10-24 and FIG. 2).

Independent claim 81 recites a system 100 for providing personalized information to a user in a commercial establishment, the system 100 comprising: at least one database 71-81 storing information related to a user (*See e.g.*, Specification at page 15, line 18 to page 16, line 5 and FIGs. 1B and 3), the information related to a user comprising demographic information, personal shopping history information and purchasing preferences information (*See e.g.*, Specification at page 15, line 18 to page 16, line 5); a plurality of portable display units 10 located in a commercial establishment for use by a plurality of users in a commercial establishment (*See e.g.*, Specification at page 13, line 14 to page 14, line 11 and FIG. 1A), each portable display unit 10 of the plurality of portable display units 10 having a unique identifier (*See e.g.*, Specification at page 19, lines 17-24), and each portable display unit 10 comprising a transceiver 14, a memory device 17, 21, a user interface 12, 24, a display screen 12, a microprocessor 16, and at least one program executable by the microprocessor 16 to enable receiving, storing and displaying of information to a user in a commercial establishment (*See e.g.*, Specification at page 14, line 12 to page 15, line 13 and at page 19, lines 10-11 and FIG. 2), wherein a user activates a portable display unit 10 of the plurality of portable display units 10 to operate in a commercial establishment by providing identifying information (*See e.g.*, Specification at page 19, lines 3-20); a location tracking system 45 to determine a location of the activated portable display unit 10 in a commercial establishment using the unique identifier of the activated portable display unit 10 (*See e.g.*, Specification at page 23, lines 8-14 and FIGs. 1A and 4); a server computer 30, the server computer 30 being in communication with the location tracking system 45 and the at least one database 71-81 (*See e.g.*, Specification at page 16, lines 6-13 and FIGs. 1A and 3), the server computer 30 being configured to generate a personal shopping list for a user using the demographic information, personal shopping history information and purchasing preferences information of a user stored in the at least one database 71-81 (*See e.g.*, Specification at page 19, line 25 to page 20, line 16), and the server computer 30 being configured to generate personalized information for a user associated with products for purchase proximate to a location of the user in a commercial establishment using the location of

the activated portable display unit 10 and the demographic information, personal shopping history information and purchasing preferences information of a user stored in the at least one database 71-81 (*See e.g.*, Specification at page 28, lines 10-22); and at least one transceiver 55 in communication with the server computer 30 for transmitting the personal shopping list and personalized information generated by the server computer 30 to the activated portable display unit 10 (*See e.g.*, Specification at page 16, lines 6-13 and FIG. 1A).

Independent claim 82 recites a method of providing personalized information to a user in a commercial establishment, comprising the steps of: providing a plurality of portable display units 10 for use by a plurality of users in a commercial establishment (*See e.g.*, Specification at page 14, lines 5-11); storing information related to a user in at least one database 71-81 (*See e.g.*, Specification at page 15, line 18 to page 16, line 5 and FIGs. 1B and 3), the information related to a user comprising demographic information, personal shopping history information and purchasing preferences information (*See e.g.*, Specification at page 15, line 18 to page 16, line 5); activating, by a user, a portable display unit 10 of the plurality of portable display units 10 to operate in a commercial establishment by providing identifying information (*See e.g.*, Specification at page 19, lines 3-20); determining a location of a user in a commercial establishment with a location tracking system 45 (*See e.g.*, Specification at page 25, line 16 to page 26, line 22 and FIG. 4); generating personalized information for a user associated with products for purchase proximate to the location of the user in a commercial establishment using the location of the user in a commercial establishment and the demographic information, personal shopping history information and purchasing preferences information of a user stored in the at least one database 71-81 (*See e.g.*, Specification at page 26, line 23 to page 27, line 4); and transmitting the generated personalized information to the portable display unit 10 operated by a user in a commercial establishment (*See e.g.*, Specification at page 16, lines 6-13 and FIG. 1A), the portable display unit 10 being assigned a unique identification signal and having a transceiver 14, a memory device 17, 21, a user interface 12, 24, a display screen 12, a microprocessor 16, and at least one program executable by the microprocessor 16 to enable the portable display unit 10 to receive, store, and display the personalized information to a user in a commercial

establishment (*See e.g.*, Specification at page 14, line 12 to page 15, line 13 and at page 19, lines 10-24 and FIG. 2).

Dependent claim 48 recites the user identification system includes the user interface 12, 24 of a corresponding portable display unit 10, the user interface 12, 24 being configured for a user to enter a personal identification number and associated password into a corresponding portable display unit 10. *See e.g.*, Specification at page 18, lines 10-11.

Dependent claim 49 recites the personalized information includes a personalized shopping list. *See e.g.*, Specification at page 13, lines 14-19.

Dependent claim 50 recites the personalized information further includes information on products on the personalized shopping list that are located in proximity to the location of the activated portable display unit 10. *See e.g.*, Specification at page 14, lines 1-2.

Dependent claim 56 recites the position calculating system 40 calculates the position data relating to the location of the activated portable display unit 10 in a commercial establishment by at least one of biangulation techniques or triangulation techniques. *See e.g.*, Specification at page 25, lines 10-15 and FIGs. 5A-5C.

Dependent claim 70 recites the step of calculating the location of the portable display unit 10 includes calculating the location of the portable display unit 10 by one of biangulation techniques and triangulation techniques using the received unique identification signal. *See e.g.*, Specification at page 25, lines 10-15 and FIGs. 5A-5C.

Dependent claim 73 recites the step of identifying a user includes: entering, by a user, a personal identification number and associated password into the portable display unit 10; and authenticating the personal identification number and associated password entered by a user. *See e.g.*, Specification at page 18, lines 10-11.

Dependent claim 76 recites the step of transmitting the generated personalized information to the portable display unit 10 includes transmitting a personalized shopping list to a portable display unit 10. *See e.g.*, Specification at page 13, lines 14-19.

Dependent claim 77 recites the step of transmitting the generated personalized information to the portable display unit 10 includes transmitting information on products on the personalized shopping list that are located in proximity to the location of the portable display unit 10. *See e.g.*, Specification at page 14, lines 1-2.

6. ***GROUND OF REJECTION TO BE REVIEWED ON APPEAL***

**Ground 1.** Whether claims 44-80 are unpatentable under 35 U.S.C. § 103(a) over Anandan et al. (U.S. Patent Application Publication No. 2002/0062251) in view of Herrod et al. (U.S. Patent No. 6,405,049). It is noted that in the Final Office Action dated November 2, 2006, the Examiner incorrectly identified Anandan et al. as having a publication number of "U.S. PG Pub No. 2003/0021242."

7. ***ARGUMENT***

**Ground 1.** Whether claims 44-80 are unpatentable under 35 U.S.C. § 103(a) over Anandan et al. (U.S. Patent Application Publication No. 2002/0062251) in view of Herrod et al. (U.S. Patent No. 6,405,049).

Claims 44-47, 51-55 and 57-67

Independent claim 44 and corresponding dependent claims 45-47, 51-55 and 57-67, which dependent claims rise or fall with claim 44, are believed to be distinguishable from and non-obvious in view of Anandan et al. (U.S. Patent Application Publication No. 2002/0062251), hereafter referred to as "Anandan" in view of Herrod et al. (U.S. Patent No. 6,405,049), hereafter referred to as "Herrod."

Anandan, as understood, is directed to a system and method for conducting consumer research and marketing using wireless technologies. The system for communicating with a consumer includes a wireless identification device associated with the consumer at a premises, a wireless identification device detector to communicate with the wireless identification device, a first computer in communication with the wireless identification device detector for identifying the consumer associated with the wireless identification device, a wireless reception device associated with the consumer, and a second computer in communication with the first computer,

for transmitting a message to the wireless reception device, the content of the message being responsive to the premises' identity or responsive to the premises' contents. The message to the consumer includes prompts to elicit information from the consumer relating to the premises, a customer satisfaction survey, a product promotion, a link to an Internet page, alphanumeric text, or a voice message.

Herrod, as understood, is directed to a portable data device and a cradle for receiving the portable data device. The cradle is arranged to recharge the portable data device power supply and/or upload or download information to and from the portable data device. The cradle and portable data device are in wireless communication allowing a minimum of processing and data storage capability at the front end and hence operation of the portable data device as a thin client. One application of the portable data device is a retail application where the retail outlet provides a plurality of portable terminals in their respective cradles. The customer selects a terminal from a cradle. Also provided in the retail outlet is a plurality of wireless transmitters or access points, at appropriate locations. As the customer moves about the retail outlet, the access points broadcast to the terminal. The access point transmits information concerning products available in the locality of the terminal.

Applicant respectfully submits that the Examiner has failed to set forth a *prima facie* case of obviousness with the proposed combination of Anandan and Herrod.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

See Manual of Patent Examining Procedure, 8<sup>th</sup> Edition, Revision 5 (MPEP), § 2143.

Furthermore, when considering and determining obviousness under 35 U.S.C. § 103, the Examiner must follow the four factual inquiries set forth in *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966) which are:

(A) Determining the scope and contents of the prior art;



- (B) Ascertaining the differences between the prior art and the claims in issue;
- (C) Resolving the level of ordinary skill in the pertinent art; and
- (D) Evaluating evidence of secondary considerations.

See MPEP, § 2141.

To begin, Appellant asserts that the Examiner's proposed combination of Anandan and Herrod does not teach or suggest all of the recited limitations in independent claim 44.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

See MPEP, § 2143.03.

Claim 44 recites in part "the server computer being configured to generate personalized information for a user in a commercial establishment based on the location of the portable display unit and the information related to a user stored in the at least one database." The proposed combination of Anandan and Herrod does not teach or suggest this recited limitation. The system in Anandan, which Appellant believes the Examiner is relying on to show this limitation, is directed to a system that is only concerned with determining a user location (or presence) at the premises of a particular store, e.g., the user is at a grocery store or clothing store, etc., and then providing the user with information based on the store type or store content. (See Anandan, paragraph 0009). In contrast, the recited limitation in claim 44 which is directed to the user's location within the commercial establishment, e.g., next to the milk case in a grocery store, and providing the user with personalized information based on that specific location within the commercial establishment. The system in Anandan is not intended to determine the user's location within the store premises, just the presence of the user at the store premises. Further, even if the system in Anandan could determine the location of a user throughout the store, the system in Anandan is not capable or configured to provide personalized information to a user based on their location in the store because the system in Anandan is intended to be able to provide the user with information on a variety of different stores and not specific information regarding locations within a particular store.

Furthermore, the system in Herrod is not intended to determine the specific location of a user in the store, only the proximity of a user to one of the access points, which could locate the user at a point within a 360-degree perimeter surrounding the access point. In addition, since the system in Herrod cannot determine the location of a user, or even if the system in Herrod could determine the location of the user, the system in Herrod is not configured to and cannot provide the user with personalized information based on the user location. The system in Herrod is configured to provide all users with predetermined information on products near the access point. Thus, since neither Anandan nor Herrod teaches or suggests Appellant's recited limitation, Appellant asserts that the proposed combination of Anandan and Herrod cannot also teach or suggest the recited limitation. Therefore, since Anandan and Herrod do not teach or suggest all of the recited limitations in claim 44, Appellant submits, that claim 44 is distinguishable from Anandan and Herrod and is therefore allowable.

Next, Appellant submits that the Examiner has improperly combined Anandan and Herrod by failing to provide a proper motivation to combine the references.

"There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obvious was held improper.).

*See* MPEP, § 2143.01.

First, it appears to Appellant that the Examiner has asserted that the motivation to combine Anandan and Herrod is based on the nature of the problem to be solved. Specifically, the Examiner has stated that one would be motivated to make the modification to ensure "on the spot communication between the user and the commercial establishment." *See* Final Office Action, section 3, page 3. However, this motivation is improper because the combination of references is not necessary to solve the stated problem, i.e., on the spot communication. Appellant submits that this motivation is improper because the Examiner has already asserted that Anandan discusses this feature (*See* Final Office Action, section 3, page 3), thus there would be no need to make the proposed combination as Anandan already has the feature to be added by Herrod.

Next, the teachings of the references do not provide a motivation to combine the references because the Examiner has provided no teaching or suggestion in Anandan that would indicate the desirability of incorporating into Anandan the plurality of terminals from Herrod, nor has the Examiner cited any passage in Herrod that would indicate that the activation of a terminal of the plurality of terminals by a user from Herrod can be used in the device of Anandan. Finally, the Examiner has not asserted that the motivation to combine Anandan and Herrod is based on the knowledge of persons of ordinary skill in the art.

Since the Examiner has not provided a proper motivation to combine the Anandan and Herrod, Appellant respectfully submits that the Examiner has improperly combined Anandan and Herrod based on the teachings in Appellant's specification, which is impermissible hindsight reasoning by the Examiner.

In making the assessment of differences, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. *Env'tl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698 [218 USPQ 865] (Fed. Cir. 1983) (noting that "virtually all [inventions] are combinations of old elements."). The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. This form of hindsight reasoning, using the invention as a roadmap to find its prior art components, would discount the value of combining various existing features or principles in a new way to achieve a new result – often the very definition of invention.

Section 103 precludes this hindsight discounting of the value of new combinations by requiring assessment of the invention as a whole. This court has provided further assurance of an "as a whole" assessment of the invention under §103 by requiring a showing that an artisan of ordinary skill in the art at the time of invention, confronted by the same problems as the inventor and with no knowledge of the claimed invention, would select the various elements from the prior art and combine them in the claimed manner. In other words, the examiner or court must show some suggestion or motivation, before the invention itself, to make the new combination. See *In re Rouffet*, 149 F.3d 1350, 1355-56 [47 USPQ2d 1453] (Fed. Cir. 1998).

*Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1276, 69 USPQ2d 1686, 1690 (Fed. Cir. 2004)

Furthermore, "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the

combination.” *See* MPEP, § 2143.01. [Emphasis in original]. In addition, “[i]f the proposed modification or combination of the prior art would change the principle or operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.” *See* MPEP, § 2143.01. “If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).” *See* MPEP, § 2143.01. “A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).” *See* MPEP, § 2141.02. [Emphasis in original].

Appellant submits that the Examiner's proposed combination of Anandan and Herrod would render Anandan unsatisfactory for its intended purpose and would change the principle or operation of Anandan. The system in Anandan either provides the consumer with a personal device having an affixed tag in advance of the consumer entering the store (*See* Anandan, paragraph 0031) or attaches the tag to the consumer's own personal wireless device. *See* Anandan, paragraphs 0044 and 0045. Thus, there would be no need to provide a plurality of personal devices at the retail establishment as discussed by Herrod because each user would already have a personal device upon entering the retail establishment. Any attempt to introduce a plurality of personal devices at the retail establishment would change the principle of operation of Anandan, which is based on each user having their own personal device.

Furthermore, requiring a user in Anandan to provide identifying information to activate a personal device renders Anandan unsatisfactory for its intended purpose. The system in Anandan is able to identify the user by the tag that has been attached to the user's personal device. *See* Anandan, paragraphs 0045 and 0046. As such, the system in Anandan does not have any need to activate a personal device by providing identifying information as recited by Appellant because the tag attached to the user's personal device in Anandan is able identify the user. In addition, Anandan seeks to identify the user upon entering and/or exiting the retail establishment (*See* Anandan, paragraph 0026), and therefore requiring a user to provide identifying information to activate a personal device (and possibly requiring the return of the

personal device) as discussed in Herrod would severely limit the ability of Anandan to automatically complete those operations.

Therefore, since the Examiner has improperly combined Anandan and Herrod, Appellant submits that Anandan and Herrod cannot render unpatentable Appellant's independent claim 44 and that independent claim 44 is allowable. Dependent claims 45-47, 51-55 and 57-67 are believed to be distinguishable from and allowable over Anandan and Herrod as depending from what is believed to be an allowable claim 44.

Claims 68, 69, 71, 72, 74, 75 and 78-80

Independent claim 68 and corresponding dependent claims 69, 71, 72, 74, 75 and 78-80, which dependent claims rise or fall with claim 68, are believed to be distinguishable from and non-obvious in view of Anandan in view of Herrod.

Appellant submits that the Examiner has improperly combined Anandan and Herrod by failing to provide a proper motivation to combine the references as discussed above with regard to claim 44. Appellant will not repeat those arguments for brevity purposes. Therefore, since the Examiner has improperly combined Anandan and Herrod, Applicant submits that Anandan and Herrod cannot render unpatentable Appellant's independent claim 68 and that independent claim 68 is allowable.

Next, claim 68 recites in part "generating personalized information for a user in a commercial establishment based on the location of a user in a commercial establishment and the information related to a user stored in the at least one database." The proposed combination of Anandan and Herrod does not teach or suggest this recited limitation. The system in Anandan, which Appellant believes the Examiner is relying on to show this limitation, is directed to a system that is only concerned with determining a user location (or presence) at the premises of a particular store, e.g., the user is at a grocery store or clothing store, etc., and then providing the user with information based on the store type or store content. (*See* Anandan, paragraph 0009). In contrast, the recited limitation in claim 68 which is directed to the user's location within the commercial establishment, e.g., next to the milk case in a grocery store, and providing the user with personalized information based on that specific location within the commercial establishment. The system in Anandan is not intended to determine the user's location within the

store premises, just the presence of the user at the store premises. Further, even if the system in Anandan could determine the location of a user throughout the store, the system in Anandan is not capable or configured to provide personalized information to a user based on their location in the store because the system in Anandan is intended to be able to provide the user with information on a variety of different stores and not specific information regarding locations within a particular store.

Furthermore, the system in Herrod is not intended to determine the specific location of a user in the store, only the proximity of a user to one of the access points, which could locate the user at a point within a 360-degree perimeter surrounding the access point. In addition, since the system in Herrod cannot determine the location of a user, or even if the system in Herrod could determine the location of the user, the system in Herrod is not configured to and cannot provide the user with personalized information based on the user location. The system in Herrod is configured to provide all users with predetermined information on products near the access point. Thus, since neither Anandan nor Herrod teaches or suggests Appellant's recited limitation, Appellant asserts that the proposed combination of Anandan and Herrod cannot also teach or suggest the recited limitation.

Therefore, since Anandan and Herrod do not teach or suggest all of the recited limitations in claim 68, Appellant submits, that claim 68 is distinguishable from Anandan and Herrod and is therefore allowable. Furthermore, dependent claims 69, 71, 72, 74, 75 and 78-80 are believed to be distinguishable from and allowable over Anandan and Herrod as depending from what is believed to be an allowable claim 68 for the reasons discussed above.

#### Claim 48

Claim 48 depends from claim 46, and the arguments above are incorporated here. Claim 48 further recites in part the user identification system includes the user interface of a corresponding portable display unit, the user interface being configured for a user to enter a personal identification number and associated password into a corresponding portable display unit. Anandan and Herrod, as understood by Appellant, do not teach or suggest the recited limitation and do not discuss any such functionality. Furthermore, the disclosure in Anandan specifically teaches away from the need to enter a personal identification number and associated password by describing a system that has a tag transponder with a unique identifier linked to a

particular consumer profile (*See* Anandan, paragraph 0031). Thus, the system in Anandan already knows the consumer or user based on the detection of the tag identifier. The Examiner asserts that Anandan teaches or suggests this limitation at the abstract and paragraphs 0003, 0007, 0009, 0011, 0012, 0013, 0026, 0027, 0028, 0035, 0037, 0041, 0043, 0044, 0062, 0065 and 0069 of Anandan. However, Appellant cannot identify any description or discussion in the Examiner's cited passages that relates to the limitation. In addition, Appellant previously requested that the Examiner specifically identify the passage in Anandan that the Examiner believes teaches the limitation, but received no such identification from the Examiner. Therefore, since Anandan and Herrod do not teach or suggest all of the limitations recited in claim 48, Appellant submits that claim 48 is distinguishable from Anandan and Herrod and therefore allowable.

#### Claim 49

Claim 49 depends from claim 46, and the arguments above are incorporated here. Claim 49 further recites in part that the personalized information includes a personalized shopping list. Anandan and Herrod, as understood by Appellant, do not teach or suggest the recited limitation and do not discuss any such functionality. Neither Anandan nor Herrod provide a personalized shopping list to a user. The Examiner asserts that Anandan teaches or suggests this limitation at the abstract and paragraphs 0003, 0007, 0009, 0011, 0012, 0013, 0026, 0027, 0028, 0035, 0037, 0041, 0043, 0044, 0062, 0065 and 0069 of Anandan. However, Appellant cannot identify any description or discussion in the Examiner's cited passages that relates to the limitation. In addition, Appellant previously requested that the Examiner specifically identify the passage in Anandan that the Examiner believes teaches the limitation, but received no such identification from the Examiner. Therefore, since Anandan and Herrod do not teach or suggest all of the limitations recited in claim 49, Appellant submits that claim 49 is distinguishable from Anandan and Herrod and therefore allowable.

#### Claim 50

Claim 50 depends from claim 49, and the arguments above are incorporated here. Claim 50 further recites in part that the personalized information further includes information on products on the personalized shopping list that are located in proximity to the location of the portable display unit. Anandan and Herrod, as understood by Appellant, do not teach or suggest

the recited limitation and do not discuss any such functionality. Neither Anandan nor Herrod provide a personalized shopping list to a user and cannot provide information on products on the shopping list in proximity to the portable display unit. The Examiner asserts that Anandan teaches or suggests this limitation at paragraphs 0032 and 0033 of Anandan. However, Appellant cannot identify any description or discussion in the Examiner's cited passages that relates to the limitation. In addition, Appellant previously requested that the Examiner specifically identify the passage in Anandan that the Examiner believes teaches the limitation, but received no such identification from the Examiner. Therefore, since Anandan and Herrod do not teach or suggest all of the limitations recited in claim 50, Appellant submits that claim 50 is distinguishable from Anandan and Herrod and therefore allowable.

#### Claim 56

Claim 56 depends from claim 55, and the arguments above are incorporated here. Claim 56 further recites in part that the position calculating system calculates the location of the portable display unit in a commercial establishment by at least one of biangulation techniques or triangulation techniques. Anandan and Herrod, as understood by Appellant, do not teach or suggest the recited limitation and do not discuss any such functionality. The system in Anandan determines location based on a particular antenna detecting the identification tag of a portable device and does not need to pinpoint the location beyond the general vicinity of the antenna (*See* Anandan, paragraph 0046). The system in Herrod does not determine the location of the terminal, but instead transmits fixed messages to all terminals in the vicinity of an access point. The Examiner asserts that Anandan teaches or suggests this limitation at the abstract and paragraphs 0003, 0007, 0009, 0011, 0012, 0013, 0026, 0027, 0028, 0035, 0037, 0041, 0043, 0044, 0062, 0065 and 0069 of Anandan. However, Appellant cannot identify any description or discussion in the Examiner's cited passages that relates to the limitation. In addition, Appellant previously requested that the Examiner specifically identify the passage in Anandan that the Examiner believes teaches the limitation, but received no such identification from the Examiner. Therefore, since Anandan and Herrod do not teach or suggest all of the limitations recited in claim 56, Appellant submits that claim 56 is distinguishable from Anandan and Herrod and therefore allowable.



Claim 70

Claim 70 depends from claim 69, and the arguments above are incorporated here. Claim 70 further recites in part calculating the location of the portable display unit by one of biangulation techniques and triangulation techniques using the received unique identification signal. Anandan and Herrod, as understood by Appellant, do not teach or suggest the recited limitation and do not discuss any such functionality. The system in Anandan determines location based on a particular antenna detecting the identification tag of a portable device and does not need to pinpoint the location beyond the general vicinity of the antenna (*See* Anandan, paragraph 0046). The system in Herrod does not determine the location of the terminal, but instead transmits fixed messages to all terminals in the vicinity of an access point. The Examiner asserts that Anandan teaches or suggests this limitation at the abstract and paragraphs 0003, 0007, 0009, 0011, 0012, 0013, 0026, 0027, 0028, 0035, 0037, 0041, 0043, 0044, 0062, 0065 and 0069 of Anandan. However, Appellant cannot identify any description or discussion in the Examiner's cited passages that relates to the limitation. In addition, Appellant previously requested that the Examiner specifically identify the passage in Anandan that the Examiner believes teaches the limitation, but received no such identification from the Examiner. Therefore, since Anandan and Herrod do not teach or suggest all of the limitations recited in claim 70, Appellant submits that claim 70 is distinguishable from Anandan and Herrod and therefore allowable.

Claim 73

Claim 73 depends from claim 71, and the arguments above are incorporated here. Claim 73 further recites in part entering, by a user, a personal identification number and associated password into the portable display unit and authenticating the personal identification number and associated password entered by a user. Anandan and Herrod, as understood by Appellant, do not teach or suggest the recited limitation and do not discuss any such functionality. Furthermore, the disclosure in Anandan specifically teaches away from the need to enter a personal identification number and associated password by describing a system that has a tag transponder with a unique identifier linked to a particular consumer profile (*See* Anandan, paragraph 0031). Thus, the system in Anandan already knows the consumer or user based on the detection of the tag identifier. The Examiner asserts that Anandan teaches or suggests this limitation at the abstract and paragraphs 0003, 0007, 0009, 0011, 0012, 0013, 0026, 0027, 0028, 0035, 0037,

0041, 0043, 0044, 0062, 0065 and 0069 of Anandan. However, Appellant cannot identify any description or discussion in the Examiner's cited passages that relates to the limitation. In addition, Appellant previously requested that the Examiner specifically identify the passage in Anandan that the Examiner believes teaches the limitation, but received no such identification from the Examiner. Therefore, since Anandan and Herrod do not teach or suggest all of the limitations recited in claim 73, Appellant submits that claim 73 is distinguishable from Anandan and Herrod and therefore allowable.

Claim 76

Claim 76 depends from claim 71, and the arguments above are incorporated here. Claim 76 further recites in part transmitting a personalized shopping list to a portable display unit. Anandan and Herrod, as understood by Appellant, do not teach or suggest the recited limitation and do not discuss any such functionality. Neither Anandan nor Herrod provide a personalized shopping list to a user. The Examiner asserts that Anandan teaches or suggests this limitation at the abstract and paragraphs 0003, 0007, 0009, 0011, 0012, 0013, 0026, 0027, 0028, 0035, 0037, 0041, 0043, 0044, 0062, 0065 and 0069 of Anandan. However, Appellant cannot identify any description or discussion in the Examiner's cited passages that relates to the limitation. In addition, Appellant previously requested that the Examiner specifically identify the passage in Anandan that the Examiner believes teaches the limitation, but received no such identification from the Examiner. Therefore, since Anandan and Herrod do not teach or suggest all of the limitations recited in claim 76, Appellant submits that claim 76 is distinguishable from Anandan and Herrod and therefore allowable.

Claim 77

Claim 77 depends from claim 76, and the arguments above are incorporated here. Claim 77 further recites in part transmitting information on products on the personalized shopping list that are located in proximity to the location of the portable display unit. Anandan and Herrod, as understood by Appellant, do not teach or suggest the recited limitation and do not discuss any such functionality. Neither Anandan nor Herrod provide a personalized shopping list to a user and cannot provide information on products on the shopping list in proximity to the portable display unit. The Examiner asserts that Anandan teaches or suggests this limitation at paragraphs 0032 and 0033 of Anandan. However, Appellant cannot identify any description or

discussion in the Examiner's cited passages that relates to the limitation. In addition, Appellant previously requested that the Examiner specifically identify the passage in Anandan that the Examiner believes teaches the limitation, but received no such identification from the Examiner. Therefore, since Anandan and Herrod do not teach or suggest all of the limitations recited in claim 77, Appellant submits that claim 77 is distinguishable from Anandan and Herrod and therefore allowable.

Claim 81

Since the Examiner has failed to examine independent claim 81, Appellant does not know if claim 81 is rejected or allowed. However, Appellant believes that claim 81 is distinguishable from and allowable over Anandan and Herrod for at least some of the reasons discussed above.

Claim 82

Since the Examiner has failed to examine independent claim 82, Appellant does not know if claim 82 is rejected or allowed. However, Appellant believes that claim 82 is distinguishable from and allowable over Anandan and Herrod for at least some of the reasons discussed above.

**8. - 10. APPENDICES**

A Claims Appendix containing a copy of the claims involved in the appeal is attached hereto. An Evidence Appendix containing a list of any evidence entered by the Examiner that will be relied upon in the appeal is attached hereto. A Related Proceeding Appendix containing a copy of decisions rendered by the Board or the Courts in any related proceedings is attached hereto.

**SUMMARY AND CONCLUSION**

In view of the above, Appellant respectfully requests a favorable action on this pending Appeal and withdrawal of the outstanding rejections. As a result of the remarks presented herein, Appellant respectfully submits that claims 44-82 are not rendered obvious by Anandan and Herrod and thus, are in condition for allowance.

The Commissioner is authorized to charge any fees determined to be due to the undersigned's Account No. 50-1059.

Respectfully submitted,  
MCNEES WALLACE & NURICK LLC

/Brian T. Sattizahn/

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Dated: July 5, 2007

**8. CLAIMS APPENDIX**

Copy of the Claims Involved in the Appeal.

44. A system for providing personalized information to a user in a commercial establishment, the system comprising:

at least one database storing information related to a user;

a plurality of portable display units located in a commercial establishment for use by a plurality of users in a commercial establishment, each portable display unit of the plurality of portable display units having a unique identifier, and each portable display unit comprising a transceiver, a memory device, a user interface, a display screen, a microprocessor, and at least one program executable by the microprocessor to enable receiving, storing and displaying of information to a user in a commercial establishment, wherein a user activates a portable display unit of the plurality of portable display units to operate in a commercial establishment by providing identifying information;

a location tracking system to determine a location of the activated portable display unit in a commercial establishment;

a server computer, the server computer being in communication with the location tracking system and the at least one database and the server computer being configured to generate personalized information for a user in a commercial establishment based on the location of the activated portable display unit and the information related to a user stored in the at least one database; and

at least one transceiver in communication with the server computer for transmitting the personalized information generated by the server computer to the activated portable display unit.

45. The system for providing personalized information of claim 44 wherein:

each portable display unit of the plurality of portable display units comprises a user identification system to determine an identity of a user operating a corresponding portable display unit; and

the server computer is configured to generate personalized information for an identified user based on the location of the activated portable display unit, the identity of the user and the information related to a user stored in the at least one database.

46. The system for providing personalized information of claim 45 wherein the information related to a user includes at least one of a demographic profile of the identified user and a shopping history of the identified user.

47. The system for providing personalized information of claim 46 wherein the user identification system comprises a substrate reader, and the substrate reader is configured to obtain identifying information on the user from a loyalty card provided to the substrate reader by the user.

48. The system for providing personalized information of claim 46 wherein the user identification system includes the user interface of a corresponding portable display unit, the user interface being configured for a user to enter a personal identification number and associated password into a corresponding portable display unit.

49. The system for providing personalized information of claim 46 wherein the personalized information includes a personalized shopping list.

50. The system for providing personalized information of claim 49 wherein the personalized information further includes information on products on the personalized shopping list that are located in proximity to the location of the activated portable display unit.

51. The system for providing personalized information of claim 46 wherein the information related to a user further includes at least one selected from a group consisting of targeted advertisements, health information, nutritional information, promotional offers, offers on sale items, offers on discounted items, information on similar or associated items, manufacturer's coupons, storewide coupons, information on user specific favorite items, and information on user specific staple items.

52. The system for providing personalized information of claim 46 wherein the information related to a user includes the demographic profile of the identified user.

53. The system for providing personalized information of claim 52 wherein the demographic profile of the identified user is determined from a questionnaire completed by the identified user.

54. The system for providing personalized information of claim 46 wherein the information related to a user includes a shopping history of the identified user.

55. The system for providing personalized information of claim 44 wherein the location tracking system further comprises:

at least one receiver for receiving a unique identifier transmitted by the activated portable display unit;

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a position calculating system for calculating position data relating to a location of the activated portable display unit in a commercial establishment using the unique identifier of the activated portable display unit received by the at least one receiver; and

at least one controller for transmitting position data relating to the location of the activated portable display unit generated by the position calculating system to the server computer.

56. The system for providing personalized information of claim 55 wherein the position calculating system calculates the position data relating to the location of the activated portable display unit in a commercial establishment by at least one of biangulation techniques or triangulation techniques.

57. The system for providing personalized information of claim 55 wherein the unique identifier of the activated portable display unit includes a radio frequency (RF) identification signal.

58. The system for providing personalized information of claim 55 wherein the unique identifier of the activated portable display unit includes an infrared identification signal.

59. The system for providing personalized information of claim 55 wherein the at least one receiver includes a plurality of transponders located at discrete locations throughout a commercial establishment.

60. The system for providing personalized information of claim 55 wherein the wherein the at least one receiver includes a plurality of transceivers located at discrete locations throughout a commercial establishment.



61. The system for providing personalized information of claim 44 wherein the at least one transceiver includes a plurality of transceivers located at discrete locations throughout a commercial establishment.

62. The system for providing personalized information of claim 44 wherein the activated portable display unit comprises a scanning device and the scanning device is configured to read product barcodes scanned by the identified user.

63. The system for providing personalized information of claim 44 wherein the at least one transmitter transmits the personalized information to the activated portable display unit using a wireless local area net.

64. The system for providing personalized information of claim 44 wherein:

the activated portable display unit further includes a microphone and a speaker;

the server computer is configured to generate audio signals incorporating the personalized information for a user; and

the microprocessor of the activated portable display unit is configured to play on the speaker the audio signals incorporating the personalized information.

65. The system for providing personalized information of claim 44 wherein the at least one transceiver transmits the personalized information to the activated portable display unit as a web page using hypertext markup language.

66. The system for providing personalized information of claim 44 wherein the server computer is configured to permit a user to access the Internet using the activated portable display unit.

67. The system for providing personalized information of claim 44 wherein the transceiver of the activated portable display unit and the at least one transceiver are wirelessly connected to permit two-way communication between the activated portable display unit and the server computer.

68. A method of providing personalized information to a user in a commercial establishment, comprising the steps of:

- providing a plurality of portable display units for use by a plurality of users in a commercial establishment;

- storing information related to a user in at least one database;

- activating, by a user, a portable display unit of the plurality of portable display units to operate in a commercial establishment by providing identifying information;

- determining a location of a user in a commercial establishment with a location tracking system;

- generating personalized information for a user in a commercial establishment based on the location of a user in a commercial establishment and the information related to a user stored in the at least one database; and

- transmitting the generated personalized information to the portable display unit operated by a user in a commercial establishment, the portable display unit being assigned a unique identification signal and having a transceiver, a memory device, a user interface, a display screen, a microprocessor, and at least one program executable by the microprocessor to enable the portable display unit to receive, store, and display the personalized information to a user in a commercial establishment.

69. The method of claim 68 wherein the step of determining a location of a user in a commercial establishment includes the steps of:

receiving the unique identification signal of the portable display unit operated by a user;  
and  
calculating the location of the portable display unit using the received unique identification signal of the portable display unit.

70. The method of claim 69 wherein the step of calculating the location of the portable display unit includes calculating the location of the portable display unit by one of biangulation techniques and triangulation techniques using the received unique identification signal.

71. The method of claim 69 further comprising the step of identifying a user in a commercial establishment and wherein the step of generating personalized information for a user includes generating personalized information for a user based on the location of a user in a commercial establishment, an identity of a user and the information related to a user stored in the at least one database.

72. The method of claim 71 wherein the step of identifying a user includes reading a loyalty card of a user with the portable display unit.

73. The method of claim 71 wherein the step of identifying a user includes:

entering, by a user, a personal identification number and associated password into the portable display unit; and

authenticating the personal identification number and associated password entered by a user.

74. The method of claim 71 wherein the step of generating personalized information for a user in a commercial establishment includes generating personalized information for a user in a commercial establishment based on the location of a user in a commercial establishment, the identity of the user and at least one of a demographic profile of the identified user and a shopping history of the identified user.

75. The method of claim 74 wherein step of generating personalized information for a user in a commercial establishment includes generating personalized information for a user in a commercial establishment based on the location of a user in a commercial establishment, the identity of the user, at least one of a demographic profile of the identified user and a shopping history of the identified user, and at least one selected from a group consisting of targeted advertisements, health information, nutritional information, promotional offers, offers on sale items, offers on discounted items, information on similar or associated items, manufacturer's coupons, storewide coupons, information on user specific favorite items, and information on user specific staple items.

76. The method of claim 71 wherein the step of transmitting the generated personalized information to the portable display unit includes transmitting a personalized shopping list to a portable display unit.

77. The method of claim 76 wherein the step of transmitting the generated personalized information to the portable display unit includes transmitting information on products on the personalized shopping list that are located in proximity to the location of the portable display unit.

78. The method of claim 71 wherein the step of transmitting the generated personalized information to the portable display unit includes transmitting the personalized information to the portable display unit using a wireless local area net.

79. The method of claim 71 wherein the step of transmitting the generated personalized information to the portable display unit includes transmitting audio signals incorporating the personalized information to the portable display unit for play on a speaker of the portable display unit.

80. The method of claim 71 wherein the step of transmitting the generated personalized information to portable display unit includes transmitting the personalized information to the portable display unit as a web page using hypertext markup language.

81. A system for providing personalized information to a user in a commercial establishment, the system comprising:

at least one database storing information related to a user, the information related to a user comprising demographic information, personal shopping history information and purchasing preferences information;

a plurality of portable display units located in a commercial establishment for use by a plurality of users in a commercial establishment, each portable display unit of the plurality of portable display units having a unique identifier, and each portable display unit comprising a transceiver, a memory device, a user interface, a display screen, a microprocessor, and at least one program executable by the microprocessor to enable receiving, storing and displaying of information to a user in a commercial establishment, wherein a user activates a

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portable display unit of the plurality of portable display units to operate in a commercial establishment by providing identifying information;

a location tracking system to determine a location of the activated portable display unit in a commercial establishment using the unique identifier of the activated portable display unit;

a server computer, the server computer being in communication with the location tracking system and the at least one database, the server computer being configured to generate a personal shopping list for a user using the demographic information, personal shopping history information and purchasing preferences information of a user stored in the at least one database, and the server computer being configured to generate personalized information for a user associated with products for purchase proximate to a location of the user in a commercial establishment using the location of the activated portable display unit and the demographic information, personal shopping history information and purchasing preferences information of a user stored in the at least one database; and

at least one transceiver in communication with the server computer for transmitting the personal shopping list and personalized information generated by the server computer to the activated portable display unit.

82. A method of providing personalized information to a user in a commercial establishment, comprising the steps of:

providing a plurality of portable display units for use by a plurality of users in a commercial establishment;

storing information related to a user in at least one database, the information related to a user comprising demographic information, personal shopping history information and purchasing preferences information;

activating, by a user, a portable display unit of the plurality of portable display units to operate in a commercial establishment by providing identifying information;

determining a location of a user in a commercial establishment with a location tracking system;

generating personalized information for a user associated with products for purchase proximate to the location of the user in a commercial establishment using the location of the user in a commercial establishment and the demographic information, personal shopping history information and purchasing preferences information of a user stored in the at least one database; and

transmitting the generated personalized information to the portable display unit operated by a user in a commercial establishment, the portable display unit being assigned a unique identification signal and having a transceiver, a memory device, a user interface, a display screen, a microprocessor, and at least one program executable by the microprocessor to enable the portable display unit to receive, store, and display the personalized information to a user in a commercial establishment.

***9. EVIDENCE APPENDIX***

Copies of any Evidence Submitted Pursuant to 37 CFR 1.130, 1.131, or 1.132 or of any Other Evidence Entered by the Examiner and Relied Upon by Appellant in the Appeal.

None.



***10. RELATED PROCEEDINGS APPENDIX***

Copies of Decisions Rendered by a Court or the Board in any Proceedings Identified Pursuant to 37 CFR 41.37(c)(1)(ii).

None.